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09/909,206	07/20/2001	Michael D. Kotzin	CS10422	9769

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DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _09 July 2004_.

2a) ☒ This action is **FINAL**.　　　2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-13 and 15-20_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-13 and 15-20_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☐ All　b) ☐ Some *　c) ☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. **Claim 5** (amended) is objected to because of the following informalities: Applicant indicates "information before receiving the service information" to be amended" to be the added portion. Examiner interprets as "before receiving the service information".

Appropriate correction is required.

2. **Claim 13** (amended) is objected to because of the following informalities: Applicant deletes [a] but failed to indicate "the" as being added. Examiner interprets as "**the**".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13, 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Spaur et al. (hereafter Spaur) (US 6,516,192 B1).

Regarding **Claim 1**, Spaur discloses a method in a mobile unit (10) which reads on the claimed "wireless communication device" for dynamically selecting communication services from different networks which reads on the claimed "plurality of service providers" capable of providing communication services to the mobile wireless communication device (see col. 5, line 40 - col. 6, line 19; col. 6, lines 52-67; col. 13, lines 13, 49-51; Figs. 1-4),

where the mobile unit (10) includes the communication system (10) that has a network selection apparatus (14) for selecting to communicate with different networks according to the services provided, comprising:

"establishing communication objectives (i.e. applications) at the device (10) for corresponding communications to be executed by the device (10);" as disclosed by, "With reference to FIGS. **2 – 4**, additional details of the analysis involving the channel selection process......FIGS. **2A – 2B** illustrate a flow diagram of steps taken in selecting a network channel (i.e. communication service). The description of this flow diagram will be made in the context of a particular application (defined as application A) (i.e. communication objective) that has certain application requirements (i.e. factors or characteristics), as set out in the chart of FIG. **3**. In particular, application A requirements include a number of factors with quantitative values. These factors are bandwidth, security, packet loss, packet latency, packet jitter and cost.......As indicated in FIG. **2A**, the application requirements for application A are obtained in accordance with step **100**" (see Figures 1 – 3 and column 10 lines 41 – 61)

Spaur discloses, "As indicated in FIG. **2A**, the application requirements for application A (i.e. communication objective) are obtained in accordance with step **100** and the corresponding operating parameters for each network channel **34a-34n** (i.e. communication services) are obtained at step **104**. The link selector **64** checks or compares each application requirement with the corresponding parameter, for each such network channel, at step **108**....In view of the given weightings, the slower, less expensive channel **34b** is deemed to be more suitable for conducting the information transfer associated with

application A." (see Figures 1 – 4 and column 10 line 60 – column 12 line 12), which directly

reads on "selecting one of the communication services (i.e. channels) for each

communication to be executed by the device based on the corresponding established

communication objectives (i.e. applications)";

Spaur further discloses "After analysis is completed, the link selector **64**

communicates with protocol stack **26** in order to modify its configuration so that protocol

stack **26** generates the correct network address or addresses for the selected network

channel(s)." (see Figure 1 column 10 lines 24 – 28), which reads on, "utilizing the selected

communication service (i.e. channel) at least for the communication whose communication

objective (i.e. application) formed the basis upon which the communication service (i.e.

channel) was selected."

Regarding **Claim 2**, Spaur discloses the method as set forth in **claim 1**, further

comprising:

"assessing the plurality of communication services (i.e. channels) relative to the

communication objective (i.e. applications) for each communication before selecting one of

the communication services." as disclosed by, "As indicated in FIG. **2A**, the application

requirements for application A (i.e. communication objective) are obtained in accordance

with step **100** and the corresponding operating parameters for each network channel **34a-34n**

(i.e. communication services) are obtained at step **104**. The link selector **64** checks or

compares each application requirement with the corresponding parameter, for each such

network channel, at step **108**" (see Figures 1, 2 and column 10 lines 60 – 66)

Regarding **Claim 3**, Spaur discloses the method as set forth in **claim 1**, further

comprising:

"assessing a plurality of communication services (i.e. channels) relative to the

communication objective (i.e. applications) for each communication during a

communication." as disclosed by, "In addition to an initial selection of a network channel

(i.e. communication services) when the information transfer is started, the system is able to

dynamically adapt to situations where the currently used network channel (i.e.

communication service) becomes unavailable or inappropriate and the transfer of information

has not yet been completed. Relatedly, the system is able to switch network channels (i.e.

communication services) within the course of a particular information transfer or session

when it is determined that a more advantageous channel (i.e. communication service) is now

available." and "When appropriate or necessary, the link selector **64** can also be used to

obtain additional bandwidth from a number of network channels (i.e. communication

services) in order to provide more bandwidth for a given application. The link selector **64** is

further available for dynamically changing the current network channel (i.e. communication

service) being utilized for a transfer to a different network channel (i.e. communication

service), based on changing communication and economic conditions." and "The link

selector **64** checks or compares each application requirement (i.e. communication objective)

with the corresponding parameter, for each such network channel (i.e. communication

service)" (see column 2 lines 9 – 18, column 10 lines 33 – 40, and column 10 lines 63 – 66)

Regarding **Claim 4**, Spaur discloses the method as set forth in **claim 1**, further

comprising:

"receiving service information (i.e. operating parameters) from the plurality of service

providers (inherent in Spaur as the originators of the communication services (i.e. channels))

at the device (10), assessing the communication services (i.e. channels) by comparing the

service information (i.e. operating parameters) received from the corresponding service

providers at the device." as disclosed by, "The network channel selection apparatus **14** also

includes a link controller/monitor **50** that is operatively connected to the network interfaces

30 for receiving information there-from and making requests thereto. In particular, the link

controller/monitor **50** takes responsibility for the control and status of the network channels

34a – **34n**.......The results of any such monitoring process are stored in the communication

link database **54**. This database **54** also contains information or data related to the operating

parameters (i.e. service information) of the network channels **34a** – **34n** (i.e. communication

services). These include, for example, coverage maps, pricing schedules that may be location

and time dependent, schedules of availability of network channels, estimated transfer error

rates and the type of channel monitoring to be conducted." and "The network channel

selection apparatus **14** further includes a link selector **64** that functions as the main controller

of the system and includes one or more processing units in connection with the analyzing

process for selection of one or more network channels through which information is to be

transferred for the current application. With regard to conducting the analysis, the link

selector **64** utilizes the application requirements for the particular application, together with

the operating parameters for the network channels **34a** – **34n** (i.e. communication services)."

(see Figure 1 and column 9 line 37 – column 10 line 2, column 10 lines 15 – 24)

Regarding **Claim 5**, Spaur discloses the method as set forth in **claim 4**, further

comprising:

"querying the plurality of service providers (inherent in Spaur as the originators of the

communication services (i.e. channels)) for service information (i.e. operating parameters)

before receiving the service information (see col. 9, lines 25-36; col. 10, lines 15-40; col. 5,

line 40 - col. 6, line 19; col. 6, lines 52-67; Figs. 2-4), where the user interactivity can

selectively choose the services of the different networks in which the before receiving would

be inherent as the status of the network information can change or be updated based on the

latest results." as disclosed by, "The network channel selection apparatus **14** also includes a

link controller/monitor **50** that is operatively connected to the network interfaces **30** for

receiving information there-from and making requests thereto. In particular, the link

controller/monitor **50** takes responsibility for the control and status of the network channels

34*a* – **34***n* (i.e. communication services)." (see column 9 lines 37 – 42)

Regarding **Claim 6**, Spaur discloses the method as set forth in **claim 4**, further

comprising:

"storing service information (i.e. operating parameters) received from the service

providers (inherent in Spaur as the originators of the communication services (i.e. channels))

at the device (10), updating service information (i.e. operating parameters) at the device

(10)." as disclosed by, "The link controller/monitor **50** has access to communication link

database **54**........ The results of any such monitoring process are stored in the

communication link database **54**. This database **54** also contains information or data related

to the operating parameters (i.e. service information) of the network channels **34***a* – **34***n* (i.e.

communication services). These include, for example, coverage maps, pricing schedules that

may be location and time dependent, schedules of availability of network channels, estimated

transfer error rates and the type of channel monitoring to be conducted." and "The network

channels **34***a* – **34***n* (i.e. communication services) also have dynamic characteristics or

properties associated therewith. That is, during use or operation of a particular network

channel, certain parameters (i.e. service information) can be checked to determine whether or

not each is meeting its expected operating function. For example, retransmit requests per

packet (packet loss), round trip packet travel time (packet latency), variation in interpacket

travel time (packet jitter) and signal strength are measured. The results of such measurements

are maintained in the communication link database **54**......." (see column 9 line 55 – column

10 line 2, column 10 lines 3 – 14)

Regarding **Claim 7**, Spaur discloses the method as set forth in **claim 1**, further

comprising:

"establishing a communication objective (i.e. application) by specifying whether a

communication to be executed by the device (10) is a data communication or a voice

communication." as disclosed by, "With reference to FIGS. **2** – **4**, additional details of the

analysis involving the channel selection process......FIGS. **2A** - **2B** illustrate a flow diagram

of steps taken in selecting a network channel (i.e. communication service). The description

of this flow diagram will be made in the context of a particular application (defined as

application A) (i.e. communication objective) that has certain application requirements (i.e.

factors or characteristics), as set out in the chart of FIG. **3**. In particular, application A

requirements include a number of factors with quantitative values. These factors are

bandwidth, security, packet loss, packet latency, packet jitter and cost.......As indicated in

FIG. **2A**, the application requirements for application A are obtained in accordance with step

100" and "These network channels **34a – 34n** are characterized by different operating

parameter values that relate to the transfer of information. By way of example, these network

channels **34a – 34n** include a plurality of the following wireless channels: cellular digital

packet data (CDPD) over which digital data is able to be sent, satellite; specialized mobile

radio (SMR).....spread spectrum featured channels.......FM frequency bands.....digital audio

broadcast (DAB) that provides a greater number of radio channels that can be adequately

heard by the listener........" (see Figures 1 – 3 and column 10 lines 41 – 61, column 6 lines 37

- 51).

Regarding **Claim 8**, Spaur discloses the method as set forth in **claim 1**, further

comprising:

"establishing communication objectives (i.e. applications) by specifying at least on

characteristic (i.e. factor) of a communication to be executed." is disclosed by, "With

reference to FIGS. **2 – 4**, additional details of the analysis involving the channel selection

process......FIGS. 2A-2B illustrate a flow diagram of steps taken in selecting a network

channel (i.e. communication service). The description of this flow diagram will be made in

the context of a particular application (defined as application A) (i.e. communication

objective) that has certain application requirements (i.e. factors or characteristics), as set out

in the chart of FIG. **3**. In particular, application A requirements include a number of factors

with quantitative values. These factors are bandwidth, security, packet loss, packet latency,

packet jitter and cost.......As indicated in FIG. **2A**, the application requirements for

application A are obtained in accordance with step **100**" (see Figures 1 – 3 and column 10 lines 41 – 61)

Regarding **Claim 9**, Spaur discloses the method as set forth in **claim 8**, further comprising:

"assessing communication services (i.e. channels) by determining which communication service (i.e. channel) optimally satisfies the specified characteristics (i.e. factors or requirements) of the communication to be executed." as disclosed by, "As indicated in FIG. **2A**, the application requirements for application A (i.e. communication objective) are obtained in accordance with step **100** and the corresponding operating parameters for each network channel **34a-34n** (i.e. communication services) are obtained at step **104**. The link selector **64** checks or compares each application requirement with the corresponding parameter, for each such network channel (i.e. communication service), at step **108**....In view of the given weightings, the slower, less expensive channel **34b** is deemed to be more suitable for conducting the information transfer associated with application A." (see Figures 1 – 4 and column 10 line 60 – column 12 line 12).

Regarding **Claim 10**, Spaur discloses the method as set forth in **claim 1**, further comprising:

"establishing communication objectives (i.e. applications) by weighting at least one characteristic (i.e. requirement or factor) for each communication to be executed." as disclosed by, "At step **128**, the associated weighting vector for each such requirement (i.e. characteristic or factor) for application A is obtained. For example, the associated weighting vector for the bandwidth application requirement (or factor) is 0.25. Each such weighting

vector for application A requirements is obtained from the application requirements database

38." (see Figures 2B, 4 and column 11 line 27 – line 32).

Regarding **Claim 11**, Spaur discloses the method as set forth in **claim 10**, further

comprising:

"assessing the communication services (i.e. channels) by comparing the weighted

characteristics (i.e. requirements or factors) of each communication to be executed to

corresponding service characteristics of each of the communication services (i.e. channels)."

as disclosed by, "At step **132**, each such weighting vector is combined with its associated

parameter value using a suitability function. The associated parameter value can be a recently

measured value for a dynamically changing parameter, such as packet loss, latency and/or

jitter. The suitability function defines the relationship among the parameters (i.e.

characteristics) for a particular channel and their associated weighting vector.........step **140**

is performed by which each of the suitability values that was determined is compared to each

other." (see Figures 3, 4 and column 11 lines 32 – 66).

Regarding **Claim 12**, Spaur discloses the method as set forth in **claim 11**, further

comprising:

"selecting a communication service (i.e. channel) having service characteristics (i.e.

requirements or factors) that most closely correlate with the weighted characteristics of the

communication to be executed." as disclosed by, "With respect to the network channels **34***a*,

34*b* that were found to be acceptable for selection........In view of the given weightings, the

slower, less expensive channel **34***b* is deemed to be more suitable for conducting the

information transfer associated with application A." (see Figures 2B, 3, 4 and column 11 line 47 – column 12 line 12).

Regarding **Claim 13**, Spaur discloses a method in a mobile wireless communication device (10) for selecting communication services (i.e. channels) available to the mobile wireless communication device (10) (see col. 5, line 40 - col. 6, line 19; col. 6, lines 52-67; col. 13, lines 13, 49-51; Figs. 1-4), where the mobile unit (10) includes the communication system (10) that has a network selection apparatus for selecting to communicate with different networks according to the services provided, comprising:

"establishing a communication objective (i.e. application) at the device (10) by identifying a characteristic (i.e. factor or requirement) of a communication to be executed by the device (10);" as disclosed by, "With reference to FIGS. **2 – 4**, additional details of the analysis involving the channel selection process......FIGS. **2A - 2B** illustrate a flow diagram of steps taken in selecting a network channel (i.e. communication service). The description of this flow diagram will be made in the context of a particular application (defined as application A) (i.e. communication objective) that has certain application requirements (i.e. factors or characteristics), as set out in the chart of FIG. **3**. In particular, application A requirements include a number of factors with quantitative values. These factors are bandwidth, security, packet loss, packet latency, packet jitter and cost.......As indicated in FIG. **2A**, the application requirements for application A are obtained in accordance with step **100**" (see Figures 1 – 3 and column 10 lines 41 – 61).

Spaur discloses, "As indicated in FIG. **2A**, the application requirements (i.e. characteristic) for application A (i.e. communication objective) are obtained in accordance

with step **100** and the corresponding operating parameters for each network channel **34***a*-**34***n*

(i.e. communication services) are obtained at step **104**. The link selector **64** checks or

compares each application requirement with the corresponding parameter, for each such

network channel, at step **108**." which reads on, "assessing a plurality of communication

services (i.e. channels) based on communication service information, received from a

plurality of at least two different networks (as well as channels or links) which reads on the

claimed "communication service providers" (see col. 6, lines 52-67; col. 9, line 37 - col. 10,

line 40; Figs. 2-4), by comparing the identified characteristic (i.e. requirement) of the

communication to be executed with a corresponding service characteristic of each of a

plurality of communication services (i.e. channels);" (see Figures 1,2 and column 10 lines 60

– 66).

Spaur further discloses, "With respect to the network channels **34***a*, **34***b* (i.e.

communication services) that were found to be acceptable for selection........In view of the

given weightings, the slower, less expensive channel **34***b* (i.e. communication service) is

deemed to be more suitable for conducting the information transfer associated with

application A (i.e. communication objective)." (see Figures 2B, 3, 4 and column 11 line 47 –

column 12 line 12) which reads on, "selecting a communication service (i.e. channel) from

the plurality of communication services (i.e. channels) having the service characteristic that

correlates most closely with the identified characteristic of the communication to be executed

by the device (10)."

Regarding **Claim 15**, Spaur discloses the method as set forth in **claim 13**, further

comprising:

"selecting a communication service (i.e. channel) before executing the communication, and selecting a different communication service (i.e. channel) during the communication." as disclosed by, "With respect to the network channels **34a**, **34b** that were found to be acceptable for selection........In view of the given weightings, the slower, less expensive channel **34b** is deemed to be more suitable for conducting the information transfer associated with application A." and "In addition to an initial selection of a network channel (i.e. communication services) when the information transfer is started, the system is able to dynamically adapt to situations where the currently used network channel (i.e. communication service) becomes unavailable or inappropriate and the transfer of information has not yet been completed. Relatedly, the system is able to switch network channels (i.e. communication services) within the course of a particular information transfer or session when it is determined that a more advantageous channel (i.e. communication service) is now available." and "When appropriate or necessary, the link selector **64** can also be used to obtain additional bandwidth from a number of network channels (i.e. communication services) in order to provide more bandwidth for a given application. The link selector **64** is further available for dynamically changing the current network channel (i.e. communication service) being utilized for a transfer to a different network channel (i.e. communication service), based on changing communication and economic conditions." and "The link selector **64** checks or compares each application requirement (i.e. communication objective) with the corresponding parameter, for each such network channel (i.e. communication service)" (see Figures 2B, 3, 4 and column 11 line 47 – column 12 line 12, column 2 lines 9 – 18, column 10 lines 33 – 40, and column 10 lines 63 – 66).

Regarding **Claim 16**, Spaur discloses the method as set forth **in claim 13**, further comprising:

"weighting the one or more identified characteristics (i.e. requirements or factors) of the communication to be executed," as disclosed by, "establishing communication objectives (i.e. applications) by weighting at least one characteristic (i.e. requirement or factor) for each communication to be executed." as disclosed by, "At step **128**, the associated weighting vector for each such requirement (i.e. characteristic or factor) for application A is obtained. For example, the associated weighting vector for the bandwidth application requirement (or factor) is 0.25. Each such weighting vector for application A requirements is obtained from the application requirements database **38**." (see Figures 2B, 4 and column 11 line 27 – line 32)

Spaur further discloses, "At step **132**, each such weighting vector is combined with its associated parameter value using a suitability function. The associated parameter value can be a recently measured value for a dynamically changing parameter, such as packet loss, latency and/or jitter. The suitability function defines the relationship among the parameters (i.e. characteristics) for a particular channel and their associated weighting vector.........step **140** is performed by which each of the suitability values that was determined is compared to each other." (see Figures 3, 4 and column 11 lines 32 – 66) which reads on, "assessing the communication services (i.e. channels) by comparing the weighted characteristics of the communication (i.e. application) to be executed to similarly weighted corresponding characteristics (i.e. parameter) of each of the communication services (i.e. channels)."

Regarding **Claim 17**, Spaur discloses a wireless communication device (10),

comprising:

"means (38) for identifying a characteristic (i.e. requirement or factor) of a

communication (i.e. application) to be executed by the device; is disclosed by, "….in the

context of a particular application (defined as application A) (i.e. communication) that has

certain application requirements (i.e. characteristic), as set out in the chart of FIG. **3**. In

particular, application A requirements include a number of factors with accompanying

quantitative values. These factors are bandwidth, security, packet loss, packet latency, packet

jitter and cost. The link selector **64** obtains this information from the application

requirements database **38** through the application requirements controller **42**….." (see

Figures 1 – 4 and column 10 lines 41 – 61)

Spaur discloses, "As indicated in FIG. **2A**, the application requirements for

application A are obtained in accordance with step **100** and the corresponding operating

parameters for each network channel **34***a* – **34***n* (i.e. communication service) are obtained at

step **104**. The link selector **64** checks or compares each application requirement (i.e.

characteristic) with the corresponding parameter (i.e. service characteristic), for each such

network channel (i.e. communication service)………After all network channels **34***a* – **34***n*

(i.e. communication services) have been analyzed…..all channels (i.e. communication

services) that have met all the application (i.e. communication) requirements (i.e.

characteristics) are deemed to be network channels available for selection." (see Figures 1, 2

and column 10 line 60 – column 11 line 11) which reads on, "means (64) for assessing

service information received from a communication service provider (e.g., network, channel,

or link) by comparing the identified characteristic (i.e. factor or requirement) of the

communication (i.e. application) to be executed with corresponding service characteristics

(i.e. operating parameter) of each of a plurality of communication services (i.e. channels)

(see col. 6, lines 52-67; col. 9, line 37 - col. 10, line 40; col. 11, line 47 - col. 12, line 12;

Figs. 2-4);

Spaur further discloses, "The network channel selection apparatus **14** also includes a

link controller/monitor **50** that is operatively connected to network interfaces **30** for receiving

information....takes responsibility for control and status of network channels **34***a* –

34*n*.....has access to a communication link database **54**.......this database **54** also contains

information or data related to operating parameters (i.e. service characteristic) of the network

channels **34***a* – **34***n*....The network channel selection apparatus **14** further includes a link

selector **64** that functions as the main controller of the system and includes one or more

processing units in connection with the analyzing process for the selection of one or more

network channels (i.e. communication services) through which information is to be

transferred for the current application (i.e. communication objective). With regard to

conducting the analysis, the link selector **64** utilizes the application requirements (i.e.

characteristics) for the particular application (i.e. communication objective), together with

the operating parameters (i.e. service information) for the network channels **34***a* – **34***n*....."

(see Figure 1 and column 9 line 37 – column 10 line 28) which reads on, "means for

selecting a communication service (i.e. channel) from the communication service provider

(e.g., network, channel, or link) having the service characteristic (i.e. operating parameter)

that correlates most closely with the identified characteristic (i.e. requirement) of the

communication (i.e. application) to be executed by the device (see col. 6, lines 52-67; col. 9,

line 37 - col. 10, line 40; col. 11, line 47 - col. 12, line 12; Figs. 2-4)."

Regarding **Claim 18**, Spaur discloses the method as set forth in **claim 17**, further

comprising:

"means (50) for receiving the service information (i.e. operating parameters) from the

communication service provider at the device (10)." as disclosed by, "The network channel

selection apparatus **14** also includes a link controller/monitor **50** that is operatively connected

to the network interfaces **30** for receiving information there-from and making requests

thereto. In particular, the link controller/monitor **50** takes responsibility for the control and

status of the network channels **34a** – **34n** (i.e. communication services)." (see Figure 1 and

column 9 lines 37 – 42).

Regarding **Claim 19**, Spaur discloses the method as set forth in **claim 18**, further

comprising:

"means (50) for requesting service information (i.e. operating parameters) from the

communication service provider (i.e. channels)." which is disclosed by, "The network

channel selection apparatus **14** also includes a link controller/monitor **50** that is operatively

connected to the network interfaces **30** for receiving information there-from and making

requests thereto. In particular, the link controller/monitor **50** takes responsibility for the

control and status of the network channels **34a** – **34n** (i.e. communication services)." (see

Figure 1 and column 9 lines 37 – 42).

Regarding **Claim 20**, Spaur discloses the method as set forth in **claim 19**, further

comprising:

"means (64) for weighting the identified characteristic (i.e. requirement) of the

communication (i.e. application) to be executed,

means (64) for comparing the weighted characteristic of the communication (i.e.

application) to be executed to corresponding service characteristics (i.e. parameter) of the

service (i.e. channel) information." are disclosed by "The network channel selection

apparatus **14** further includes a link selector **64** that functions as the main controller of the

system and includes one or more processing units in connection with the analyzing process

for selection of one or more network channels through which information is to be transferred

for the current application. With regard to conducting the analysis, the link selector **64**

utilizes the application requirements for the particular application, together with the operating

parameters for the network channels **34***a* – **34***n* (i.e. communication services)." and "With

reference to FIG. **4** as well, the description will continue regarding the operation of the link

selector **64**........ the associated weighting vector for each such requirement (i.e.

characteristic) for application A (i.e. communication objective).....each such weighting

vector is combined with its associated parameter (i.e. service characteristic) value using a

suitability function........is performed by which each of the suitability values that was

determined is compared to each other." (see Figure 1 – 4 and column 10 lines 15 – 24,

column 11 lines 12 – 66).

Response to Arguments

4.   Applicant's arguments with respect to claims 1-13, 15-20 have been considered but

are moot in view of the new ground(s) of rejection.

Conclusion

5.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until

after the end of the THREE-MONTH shortened statutory period, then the shortened statutory

period will expire on the date the advisory action is mailed, and any extension fee pursuant to

37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of

this final action.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (703) 305-

8636. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WJD,JR
20 October 2004

MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600